

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1, 6, 8, 10-15, 17, 20, 21 and 23-26 are pending in the present application. Claims 2-5, 9, 16, 18, 19 and 22 have been canceled, Claims 1, 6, 8, 10, 11-15, 17, 20, 21 and 23 have been amended, and Claims 24-26 have been added by the present amendment.

In the outstanding Office Action, Claim 14 was rejected under 35 U.S.C. § 112, second paragraph; Claims 1-6, 8 and 17-23 were rejected under 35 U.S.C. § 103 as unpatentable over “Now Where Did I Put That Can of Soup” (hereinafter “Now”); and Claims 9-16 were rejected under 35 U.S.C. § 103(a) as unpatentable over Now in view of Slotznick and “HP rewrites the rules for office desk top printers” (hereinafter “HP”).

Regarding the rejection of Claim 14 under 35 U.S.C. § 112, second paragraph, Claim 14 has been amended to depend on Claim 1 so the data receiving device has a proper antecedent basis. Accordingly, it is respectfully requested this rejection be withdrawn.

Independent Claims 1, 17 and 21 have been amended to include subject matter similar to that as recited in Claims 2-5, part of Claim 6, Claim 9 and Claim 16. Accordingly, the rejection of Claims 1-6, 8 and 17-23 under 35 U.S.C. § 103(a) as unpatentable over Now in view of Slotznick is moot.

Claims 9-16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Now in view of Slotznick and HP. This rejection is respectfully traversed.

Amended Claim 1 is directed to a consumable item system including a consumable item apparatus configured to store a variety of consumable items for an image forming apparatus at a user side, and a consumable item supply section configured to supply a variety of consumable items for the image forming apparatus to the user side upon request. The consumable item supply section is connected to the consumable item apparatus via a

communication circuit. The system also includes at least a first sensor configured to detect that a corresponding consumable item in the image forming apparatus needs replenishment, and at least a second sensor configured to detect one of a type and a size of the corresponding consumable item needing replenishment in the image forming apparatus. Also included is a consumable item replenishment single generating device configured to generate a signal indicating the first sensor has detected the corresponding consumable item needs replenishment, a detector configured to detect the signal generated by the generating device, and a counter configured to count a duration of time period that the detector detects the signal. Further, a consumable item order data transmitting device is configured to transmit order data indicating a request for the corresponding consumable item that needs to be replenished to the supplying section via the communication circuit when the signal is detected continuously by the detecting device for more than the time period set by the user, and a delivery data transmitting device included in the consumable item supplying section that is configured to transmit delivery data of the corresponding consumable item from the supplying section to the user side such that a delivery status of the corresponding consumable item to be replenished can be confirmed. Independent Claim 1 has also been amended to recite that the duration of the time period detected by the counter is adjustably set at the user side of the image forming apparatus. Independent Claims 17 and 21 include similar features.

In a non-limiting example, Figure 1 illustrates at least a first sensor S1 configured to detect that a corresponding consumable item in the image forming apparatus needs replenishment and at least a second sensor S3 configured to detect one of a type and a size of the corresponding consumable item needing replenishment in the image forming apparatus. Further, Figure 2 illustrates that the consumable item order data transmitted device transmits order data indicating a request for the corresponding consumable item that needs to be replenished to the consumable item supplying section 80 (see Figure 1) via the

communication circuit 30, when the signal is detected continuously by the detecting device for more than the time period set at the user side (see step S12). The detecting device corresponds to the CPU 16, shown in Figure 1, for example.

Thus, because the duration of the time period that the detector detects the signal may be adjustably set at the user side, the claimed system may be applied regardless of a model and a manufacturer of an image forming apparatus such as a copier, a facsimile, a printer and a duplicator of a user (see page 5, lines 23-25). That is, the system according to the present invention is robust and may be adjustably set at the user side and can be adapted to an image forming apparatus regardless of the model and the manufacturer. Further, because the time period can be set, it is possible to avoid erroneously generated signals indicating a corresponding item needs replenishment (see page 6, lines 13-15).

Further, the consumable item keeping apparatus 10 having received the delivery data may also display the delivery data on a display 14. Thus, the delivery status through the display 14 may be confirmed by viewing the order day, the scheduled delivery day and the distribution day, and is capable of reminding the consumable item supplying section 80 (see page 6, lines 19-22). Therefore, a notification is made when the consumable items are to be delivered and can appropriately modify the business environment to minimize any negative effect.

The outstanding Office Action applies Now, Slotznick and HP as teaching the claimed invention. However, Applicants note Now and Slotznick do not correspond to an image forming apparatus, and thus is respectfully submitted are non-analogous art. Further, the applied art does not teach or suggest the adjustable time period such that the system may be easily applied to any image forming apparatus. The applied art also does not teach or suggest a delivery transmitting device being included in a consumable item supplying section. Rather, Now discloses a refrigerator which monitors the type and number of

products that go in and out of the refrigerator, the location of the products and the amount left in each container of products. Slotznick teaches an intelligent system that executes tasks as a normal human being and learns from a user's behavior and makes decisions and executes actions without explicit instructions, and HP teaches a smart chip which tracks ink levels in a printer.

Accordingly, it is respectfully submitted independent Claims 1, 17 and 21 and each of the claims depending therefrom are allowable.

In addition, new Claims 24-26 have been added to set forth the invention in a varying scope, and Applicants submit the new claims are supported by the originally filed specification. In particular, new Claim 24 is similar to amended Claim 1 including the feature that the delivery data transmitting device is included in the remote item supplying section. Note, new Claim 24 does not include all of the features of amended Claim 1 such as the counter, second sensor, signal generating device and detector and does not recite that the consumable item order data transmitting device transmits order data when the signal is detected continuously by the detecting device for more than the time period set at the user side. New independent Claim 24 also includes the feature recited in dependent Claim 15, for example, in which a display at the user side is included on which the delivery data is displayed. New independent Claims 25 and 26 include similar features noted above with respect to Claim 24 and correspond to amended Claims 17 and 21, respectively. It is respectfully submitted the features noted in these claims are not taught or suggested in the applied art (especially that the delivery data transmitting device is included in the remote item supplying center).

The specification has also been amended to correct a minor informality. It is believed no new matter has been added.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.


Respectfully submitted,

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